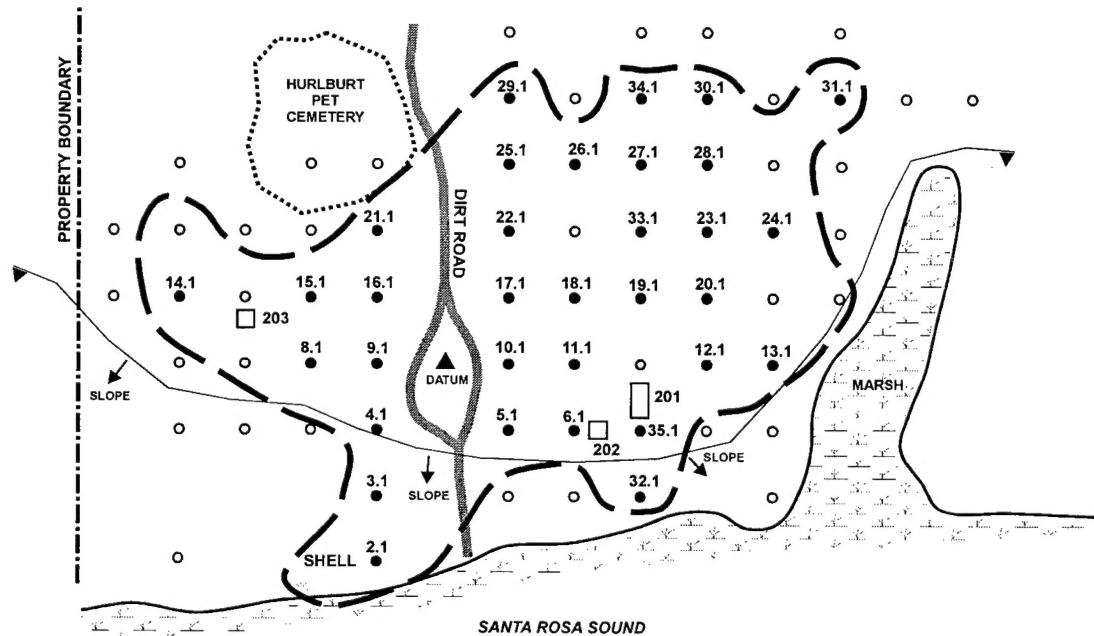


Phase II Archaeological Testing of 8OK61 Hurlburt Field, Florida

Final Report



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1997

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13. ABSTRACT (Maximum 200 words) Brockington and Associates, Inc., through the Nakata Planning Group, conducted National Register of Historic Places (NRHP) evaluation of 8OK61 at Hurlburt Field, Florida. The site contains several discreet shell middens associated with single occupation prehistoric components. These components include Deptford, transitional Deptford/Swift Creek, and Weeden Island. Middle Gulf Formation Norwood ceramics and Late Mississippian Fort Walton ceramics also were recovered from the site; however, no evidence of intact cultural deposits associated with these occupations was encountered. The middens appear to represent refuse associated with single family residences during the Deptford/Swift Creek and Weeden Island occupations; the earlier Deptford midden may represent a short term occupation directed toward the harvesting and processing of oysters. The presence of the discreet single component middens indicates that the site can contribute significant information concerning the settlement and subsistence patterns of the Early to Late Woodland phases. Therefore, 8OK61 is eligible for the NRHP.			
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Hurlburt Field, Florida**

Final Report

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Prepared for:

Nakata Planning Group

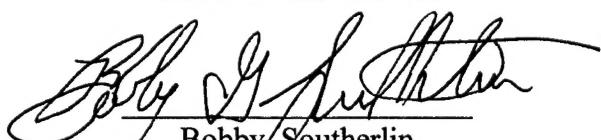
Under contract with:

The US Army Corps of Engineers, Mobile District
and the United States Air Force, Hurlburt Field, Florida

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October 1997

Executive Summary

In April 1997, Brockington and Associates, Inc. conducted Phase II archaeological testing of 8OK61, Hurlburt Field, Florida to determine its National Register of Historic Places (NRHP) eligibility. To comply with Federal legislation and regulations governing the disposition of cultural resources (National Historic Preservation Act of 1966, as amended, Executive Order 11593, and the Archaeological and Historic Preservation Act of 1974), the US Army Corps of Engineers, Mobile District (USACE), and the United States Air Force, Hurlburt Field sponsored the Phase II testing of 8OK61.

A Florida site form and subsequent update forms indicate that 8OK61 was originally identified and recorded by Florida State University in the 1960s; information regarding this visit is not available. Additional information on 8OK61 was recorded during the survey of Eglin Air Force Base by New World Research, Inc. in 1982. At that time, ceramic sherds and shell were noted eroding out of the bank overlooking Santa Rosa Sound. Prior to Phase II testing, little information was available on the site.

The Phase II testing of 8OK61 included background research, shovel test excavations, and test unit excavations ($n=3$). During the shovel testing, 50 by 50 cm/1.6 by 1.6 ft shovel tests were excavated across the site (within the Hurlburt Field property boundary) at 15 m/50 ft intervals. Based on the results of these shovel tests, three test units were excavated to assess the integrity of deposits. A site map was prepared to document the locations of all excavations, cultural and natural features, and approximate contours.

Due to the presence of intact deposits capable of addressing research questions considered important to the region, 8OK61 is recommended eligible for the NRHP. It is recommended that 8OK61 be protected from ground disturbing activities. An NRHP nomination form for 8OK61 has been prepared to incorporate the site into the multi-resource district of NRHP eligible prehistoric sites at Hurlburt Field.

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Chapter I. Introduction

In April 1997, Brockington and Associates, Inc. conducted Phase II archaeological testing of 8OK61, Hurlburt Field, Florida (Figure 1) to evaluate its NRHP eligibility. Hurlburt Field sponsored the Phase II testing of 8OK61 to comply with Federal legislation and regulations governing the disposition of cultural resources (National Historic Preservation Act of 1966, as amended, Executive Order 11593, and the Archaeological and Historic Preservation Act of 1974), as administered by the US Army Corps of Engineers, Mobile District (USACE), and the United States Air Force.

Prior to Phase II testing, little information was available for 8OK61. A Florida site form and subsequent update forms indicate that the site was originally identified and recorded by Florida State University in the 1960s; information regarding this visit is not available. Additional information on 8OK61 was recorded during the survey of Eglin Air Force Base by New World Research, Inc. in 1982. At that time, ceramic sherds and shell were noted eroding out of the bank overlooking Santa Rosa Sound.

The Phase II testing of 8OK61 included background research, shovel test excavations, and test unit excavations ($n=3$). During the shovel testing, 50 by 50 cm/1.6 by 1.6 ft shovel tests were excavated across the site (within the Hurlburt Field property boundary) at 15 m/50 ft intervals. Based on the results of these shovel tests, three test units were excavated to assess the integrity of deposits. A site map was prepared to document the locations of all excavations, cultural and natural features, and approximate contours.

Phase II testing of 8OK61 indicates that shell midden and non-midden deposits are intact. Due to the presence of intact deposits capable of addressing research questions considered important to the region, 8OK61 is recommended eligible for the NRHP.

Site 8OK61 is located on a moderately low relict sand dune overlooking Santa Rosa Sound. The Eglin Air Force Base Historic Preservation Plan (HPP) presents a detailed summary of the natural setting of Eglin Air Force Base and Hurlburt Field (Thomas and Campbell 1993) and will not be presented here. This information is derived from major climatological (US Department of Commerce 1972), geomorphological (Simpson and Riehl

Figure 1 removed in accordance with the
National Historic Preservation Act
which disallows public release of sensitive
archaeological site location information.

For planners and others with a need to know these site locations,
please contact the Florida Department of Archaeology.

Figure 1. Map showing the location of 8OK61 (USGS Mary Esther (1970)
quadrangle).

1981; Balsillie 1986), and geological (Barraclough 1967; Marsh 1966; Musgrove et al. 1965) resources for northwest Florida.

The cultural setting of Eglin Air Force Base and Hurlburt Field is presented in the Eglin Air Force Base HPP (Thomas and Campbell 1993) and is summarized briefly here. Much of this information is derived from technical studies of Florida's prehistory such as Milanich and Fairbanks (1980) and Willey (1949). Northwest Florida was occupied by human populations by at least 10,000 BC. These early populations were highly mobile hunters and gatherers. Changing environmental conditions and increases in population pressure shifted the nature of settlement and subsistence in the region by 2,000 BC. Innovations in technology and changes in social organization further changed the nature of these populations.

Site 8OK61 has produced evidence of Deptford (500 BC - AD 200), Santa Rosa-Swift Creek (AD 200 - 350), and Weeden Island (AD 350 - 1200) components of the Woodland Stage. This period of prehistory witnessed a gradual decrease in mobility, culminating in completely sedentary villages by the Mississippian Stage (AD 1200 - 1700). This shift in settlement patterns was likely a result of changing environmental conditions and increases in population pressure. Domestication of plants may have occurred as early as the Late Woodland (Weeden Island); full domestication is evident by the Mississippian Stage. By AD 1200, the social and political organization of Native American populations had become considerably more complex. European contact, beginning in the middle of the sixteenth century, brought about major changes in the structure of Native American groups.

Chapter II outlines the field methods employed during these investigations. A discussion of the criteria used in assessing the NRHP eligibility of this site is also presented. Results of the investigations and management recommendations are provided in Chapter III.

Chapter II. Methods of Investigation

Phase II testing of 8OK61 included background research, shovel test and test unit excavations, laboratory analysis of recovered materials, and artifact curation. The following is a review of the methods used during these investigations.

Background Research

Public records were reviewed at the Florida Site Files (FSF) and Division of Historic Resources. During the course of these investigations, the following persons provided valuable information on 8OK61 and related sites: Dorothy Gibbens (US Army Corps of Engineers, Mobile District), Philip Pruitt (Natural Resources Manager, Hurlburt Field AFB), Laura Kammerer (Florida State Historic Preservation Office), and Janice Campbell (Prentice Thomas and Associates, Inc.).

Field Methods

Initially, a grid was established across the site with a transit and tapes. The datum point, designated N500 E500, was located on the edge of the clay road that bisects the site. All shovel tests, test units, and cultural and natural features were tied into the grid. Shovel tests measured 50 by 50 cm/1.6 by 1.6 ft and were excavated to a minimum depth of 1 m/3.2 ft below surface (bs). Shovel tests were excavated on a 15 by 15 m/50 by 50 ft grid across the entire site. Fill from these shovel tests was screened through 6.35 mm/0.25 inch wire mesh screen. Information regarding natural and cultural deposits, location, and observed features was noted for each shovel test.

Using data compiled from shovel testing, test units were placed in areas where shovel tests produced evidence of intact deposits or where the possibility of encountering features was good. Test units were excavated in 10 cm/0.33 ft arbitrary levels within natural soil horizons to sterile subsoil. At least 10 cm/0.33 ft of sterile subsoil was excavated in each unit. Standardized level forms were completed for each level within each unit. All soil was

screened through 6.35 mm/0.25 inch wire mesh screen. At least one profile of each unit was drawn and photographed in black and white print and color slide film.

Subsequent to the completion of test unit excavations, a site map was prepared. This map shows the locations of all excavation units, natural and cultural features, approximate contours, a scale, a north arrow, and site boundaries. All shovel tests and test units were backfilled upon completion.

Laboratory Methods

All remains recovered during these investigations were cleaned and stored as appropriate for their medium of manufacture. Internal site proveniences were assigned for each location within the site where cultural remains were recovered (e.g., shovel test, surface scatter, and unit levels). Each class or type of remains within each provenience was assigned a separate catalog number within that provenience. Each catalog "unit" was placed in a separate plastic storage container and labeled as to site, provenience, and catalog number. All of the separate containers associated with each provenience were placed in an appropriately labeled larger plastic container; each provenience container was placed in a single large plastic storage container and appropriately labeled for permanent curation. All artifacts will be shipped to the Alabama Office of Archaeological Services, Moundville, Alabama.

Typological identification as manifested by technological and stylistic attributes served as the basis for prehistoric artifact analysis. Lab personnel classified all prehistoric ceramic sherds larger than 2 by 2 cm/0.8 by 0.8 inch by surface decoration and aplastic content. When recognizable, they recorded these attributes for residual sherds, i.e., those smaller than 2 by 2 cm/0.8 by 0.8 inch. Nondiagnostic residual sherds were tabulated as a group. Sherds and other diagnostics were then compared to published type descriptions from available sources (Milanich 1994; Willey 1949).

NRHP Evaluation Methods

Site 8OK61 was assessed as to its significance based on the criteria of the National Register of Historic Places (NRHP) as per 36 CFR 60.4. In order for a cultural resource to be defined as significant (i.e., eligible for the NRHP), it must meet one or more of the following four criteria (National Park Service 1991):

- A. The resource is associated with events that have made a significant contribution to the broad pattern of history.*
- B. The resource is associated with the lives of persons significant in the past.*
- C. The resource embodies distinctive characteristics of a type, period, or method of construction, or represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.*
- D. The resource has yielded, or is likely to yield, information important to history or prehistory.*

Site 8OK61 was evaluated based on its ability to yield important archaeological information (Criterion D). As per 36 CFR 60.4 [d], sites that yield, or have yielded, information important in history or prehistory can be eligible for the NRHP. The ability of an archaeological site to yield important information is based on the number and kinds of artifacts that are present, the relationships of these artifacts to each other and other kinds of features (e.g., buried soil horizons, architectural features, subsurface soil features) that are present, and the similarity of the encountered artifacts and features to those present at other sites in the region.

To be eligible for the NRHP, 8OK61 must possess artifacts that can be employed to determine the past use of the locale and the approximate date of its past use. These artifacts should occur in sufficient numbers to permit quantitative assessments of their distributions across the site, both horizontally and vertically. Also, these artifacts should occur within or in association with intact soil deposits that represent specific human activities, suites of activities, or natural events that occurred at the site. These associations are critical to understanding how the site was created (i.e., the kinds of human activities that occurred at

the site to produce the artifacts and features) and how the site has changed since its initial occupation. The presence of artifacts and features that can be employed to make these interpretations is essential to recommending a site eligible for the NRHP. Additionally, a site that produces extremely rare artifacts or evidence of extremely rare activities may be considered eligible.

Site 8OK61 must possess artifacts and/or features that can be employed to address important research issues in order to be nominated eligible for the NRHP. These issues include culture chronology, artifact assemblage composition, and subsistence patterns.

Chapter III. Results and Recommendations

The Phase II testing of 8OK61 consisted of background research, field investigations, and laboratory analyses. During the background research, site forms and all previous documentation for 8OK61 were reviewed. During field investigations, a contour map was prepared for the site (Figure 2). The excavation of 50 by 50 cm shovel tests (n=65) across the site aided in determining site boundaries. Based on these results of this shovel testing, a map was prepared (Figure 3).

Background Research

Site forms on file at the Florida Site Files indicate that 8OK61 was originally discovered by Florida State University in the 1960s (Site Form submitted 1982). Information regarding this visit is not available. Subsequent investigations at the site by New World Research, Inc. in 1982 indicated that deposits appeared intact. Phase II testing of 8OK61 was recommended to determine the true NRHP eligibility of the site. Shovel testing and surface collection in 1982 indicated that the site encompasses approximately four acres and extends outside of the Hurlburt Field property boundary.

Field Investigations

A field visit was made to 8OK61 prior to Phase II excavations (March 1997) by representatives from the US Army Corps of Engineers, Mobile District (Ms. Dorothy Gibbens), Florida State Historic Preservation Office (Ms. Laura Kammerer), US Air Force, Hurlburt Field (Mr. Philip Pruitt), and Brockington and Associates, Inc. (Mr. Bobby Southerlin). This site visit was made to assess the location and present condition of 8OK61.

Shovel Tests

In total, 65 shovel tests were excavated during the Phase II testing of 8OK61 (see Figure 3). This shovel testing determined that the approximate dimensions of the site are 60

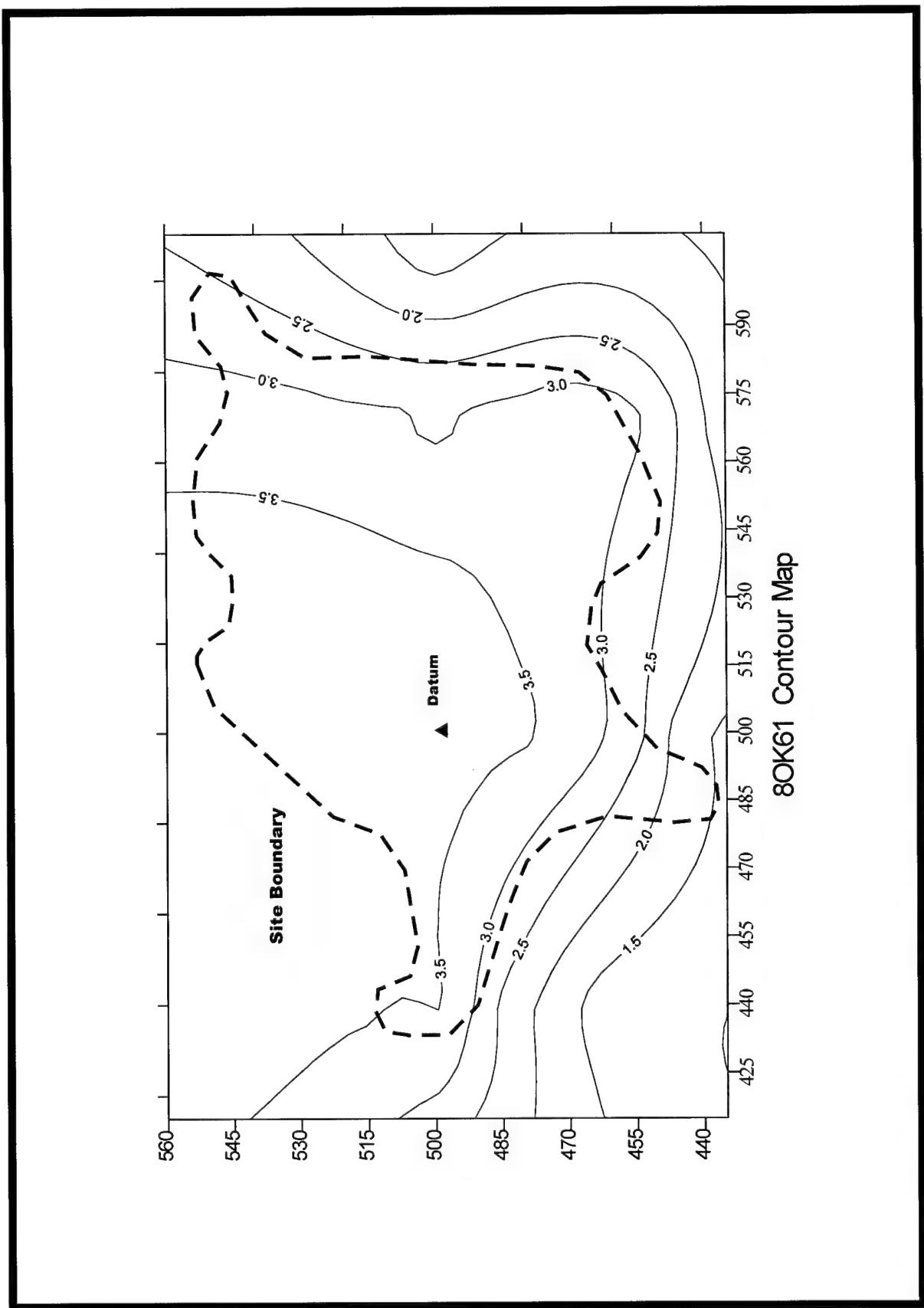


Figure 2. Map showing the approximate contours of 8OK61.

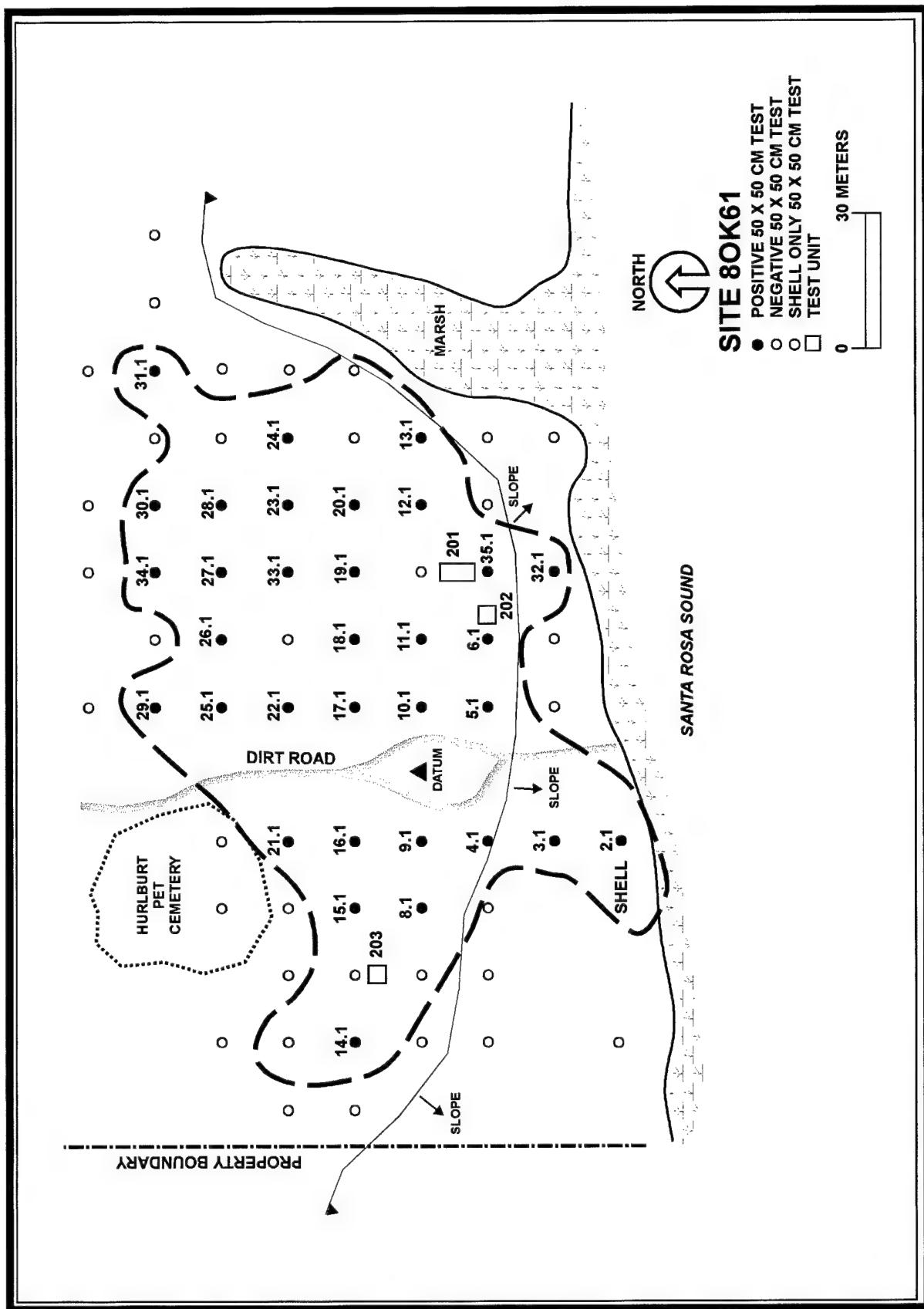


Figure 3. Plan view of 8OK61 showing the locations of all excavations and natural and cultural features.

m N/S by 150 m E/W. The excavation of two sterile shovel tests adjacent to the property boundary indicates that the site may not extend beyond the property boundary as originally defined. Shovel tests excavated at 8OK61 indicate that shell midden deposits are densest in the southeast quadrant of the site. Of the 65 shovel tests excavated at 8OK61, 30 produced artifacts and 11 were positive for shell only. Therefore, 41 of 65 shovel tests excavated during these investigations produced evidence of cultural occupation. Shell midden deposits with artifacts, shell midden deposits without artifacts, and non-shell midden deposits with artifacts were noted during the shovel tests excavations. Table 1 presents a tabulation of artifacts by type recovered from shovel test excavations.

Table 1. Artifact Tabulations for Shovel Tests at 8OK61.

Artifact Category	Total
Sherds	66
Lithics	5
Faunal Material (Bone)	11.3 g
Historic	46

An analysis of the distribution of artifacts recovered from shovel test excavations indicates that historic artifacts recovered from the site are restricted to the central portion of 8OK61, adjacent to the dirt road. These materials represent a late nineteenth/early twentieth century occupation, possibly a residence or fishing camp. A cluster of shovel tests in the south central portion of the site produced faunal remains (proveniences 10.1, 5.1, 35.1). Lithic materials were recovered primarily from the northeast quadrant of 8OK61 (proveniences 27.1, 30.1, 34.1). Ceramics were recovered from 19 shovel tests distributed across the entire site.

Test Units

Test units were excavated on those portions of the site that produced potentially intact midden deposits during shovel test excavations. It was expected that the excavation of test units in these areas would increase the potential for encountering cultural features or intact

shell midden deposits. Table 2 presents a tabulation of artifacts recovered from test unit excavations.

Table 2.

Tabulation of Artifacts Recovered from Test Unit Excavations.

Test Unit	Lithics	Sherds	Fauna (g)	Historic	Clam (kg)	Oyster (kg)
201 (1 by 2 m)	1	59	43.6	0	4.46	20.20
202 (1 by 1 m)	0	31	12.8	5	32.18	0.5
203 (1 by 1 m)	3	10	0	0	6.34	12.26
<i>Total</i>	4	100	56.4	5	42.98	32.96

Test Unit 201

Test Unit 201 was excavated in the southeast quadrant of the site, adjacent to a shovel test (provenience 35.1) that produced evidence of intact shell and artifact deposits. Although moderate densities of shell were noted from 0-16 cm bs, this appears to represent loose shell and not midden deposits. From 16-25 cm bs, dense shell midden was encountered. Figure 4 shows the east profile of Test Unit 201.

Diagnostic ceramics recovered from TU 201 consist of a Mississippian shell tempered (Fort Walton) sherd from the A horizon. Woodland Period (Deptford and Swift Creek) sherds were recovered from the shell midden. The stratigraphic sequence noted above suggests that intact cultural horizons can be discerned from these deposits. Shell recovered from this unit consists of 20.20 kg of oyster (*Crassostrea virginica*), with 4.46 g of clam (*Merceneria* sp.). Although only a single lithic flake was recovered from this unit, a moderately high frequency of ceramics (n=59) and 43.6 g of faunal remains (bone) were recovered. Sub-shell midden artifact deposits were sparse. It is likely that these deposits represent the downward movement of artifacts through sandy soils.

Test Unit 202

Test Unit 202 was excavated in the southeast quadrant of the site, adjacent to a shovel test (provenience 6.1) that produced evidence of intact shell and artifact deposits. Although



SITE 8OK61 UNIT 201, EAST PROFILE

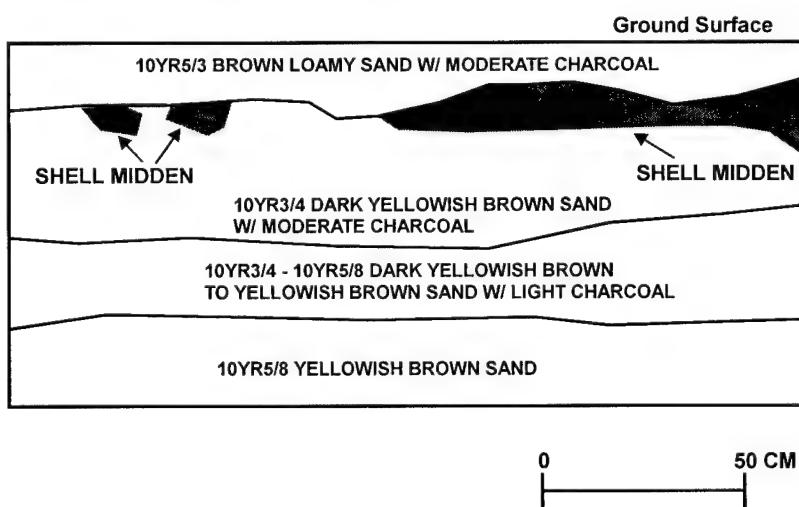


Figure 4. East profile of Test Unit 201.

only loose shell was noted from 0-10 cm bs, dense shell midden (primarily oyster) was encountered from 10 - 30 cm bs. Figure 5 presents the south profile from TU 202.

Diagnostic ceramics recovered from TU 202 consist of Weeden Island and Deptford sherds. The presence of Weeden Island ceramics in association with the shell midden indicates an intact buried cultural horizon. Shell recovered from this unit consists primarily of clam (32.18 kg), with a moderate amount of oyster (0.5 kg). No lithic materials were recovered from TU 202. However, moderate frequencies of ceramics (n=31) and faunal materials (12.8 g) were recovered from this unit. The sparse ceramics recovered from below the shell midden represent the downward movement of these materials through sandy soil. The low density of Deptford ceramics in sub-shell midden contexts indicates that these deposits can contribute little to our understanding of the prehistory of the region.

Test Unit 203

Test Unit 203 was excavated in the western quadrant of the site. Although only loose shell was noted from 0-15 cm bs, dense shell midden was encountered from 15 - 35 cm bs. Figure 6 presents the south profile of TU 203.

Diagnostic ceramics recovered from TU 203 consist of Deptford Check Stamped sherds from the shell midden and Norwood ceramics from a sub-midden context. The presence of Norwood ceramics from below the shell midden indicates that 8OK61 was occupied at least briefly during the Middle/Late Gulf Formation Stage. The stratigraphic sequence noted above indicates that cultural horizons can be discerned from these deposits. Shell recovered from this unit consists primarily of oyster (12.26 kg), with a moderate amount of clam (6.34 kg). Low frequencies of lithics (n=3) and ceramics (n=10) were recovered from this test unit. No faunal materials were recovered. Four Norwood ceramics were recovered from below the shell midden. However, given the general paucity of artifacts and lack of features associated with these ceramics, it is unlikely that the Norwood occupation can contribute to our understanding of the prehistory of the region.



**SITE 8OK61
UNIT 202, SOUTH PROFILE**

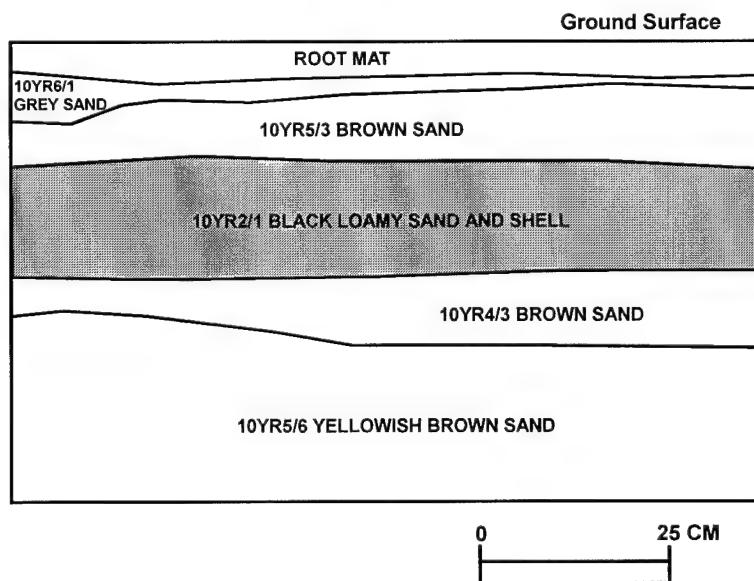


Figure 5. South profile of Test Unit 202.



**SITE 8OK61
UNIT 203, SOUTH PROFILE**

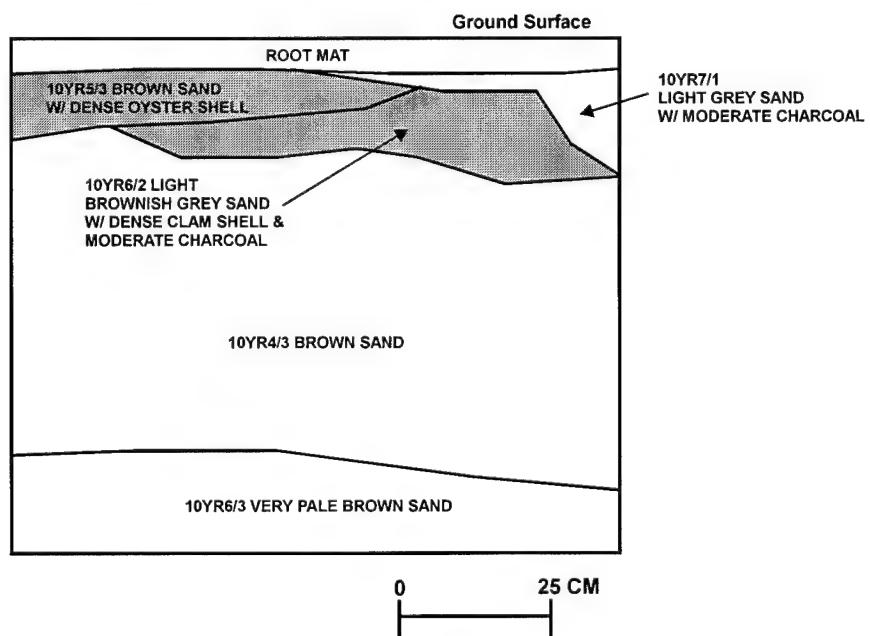


Figure 6. South profile of Test Unit 203.

Discussion

Shovel tests and test units excavated at 8OK61 indicate that this site consists of several discrete shell middens associated with single component occupations. The excavation of TU 201 produced evidence of an intact transitional Deptford/Swift Creek shell midden composed primarily of oyster shell. Test Unit 202 produced evidence of an intact Weeden Island shell midden composed almost entirely of clam shell. Test Unit 203 produced evidence of an intact Deptford shell midden composed of oyster and clam shell concentrations. Charcoal and/or faunal remains were recovered from each of these shell middens.

Shell midden sites can represent a variety of functions, depending upon the types of materials recovered (Espenshade et al. 1994). Shell middens that produce low numbers of artifacts and faunal materials, but high densities of shell typically represent processing stations. Shell middens with moderate to low shell deposits, moderate artifact densities, and moderate to high faunal remains represent single family shell midden occupations. The amount of shell deposited at these types of sites depends upon the duration of occupation and the numbers of individuals in the group. Multi-family residences or base camps often include large amounts of shell, high artifact densities, and moderate faunal remains (Espenshade et al. 1994:178).

Deposits at 8OK61 appear to represent two distinct types of activity areas: 1) a shellfish processing station and 2) a single-family shell midden occupation (Espenshade et al. 1994). The shell middens excavated in Test Units 201 and 202 appear to represent single family Deptford/Swift Creek (TU 201) and Weeden Island (TU 202) shell middens. This is based on the presence of moderate/high densities of shell, moderate artifact densities, and moderate faunal remains. Excavations west of the clay road (TU 203) recovered evidence of a Deptford shell processing station. Moderate shell densities, low artifact densities, and minimal faunal remains contribute to this assessment. Appendix A presents the artifact inventory for 8OK61.

Non-shell midden deposits noted at 8OK61 indicate that special use areas may be present on the site. Shovel tests in the northeast quadrant of the site produced lithic debitage only. Likewise, shovel tests in the east central portion of the site contained no shell. The

presence of special use areas on the site indicates that research questions concerning intra-site variability can be addressed.

Artifacts associated with the Gulf Formation Stage and Mississippian Period were also recovered from 8OK61. However, no features or middens were found in association with these remains. The Fort Walton ceramics at 8OK61 were recovered from the A horizon in shovel test 23.1 and in TU 201. These ceramics were mixed with modern and/or historic artifacts. It is unlikely that these remains can contribute to our understanding of the Fort Walton Phase. Very few Norwood ceramics were recovered during these investigations. Given the paucity of diagnostic artifacts associated with the Norwood Phase, it is unlikely that this site can address research questions concerning this phase of the Middle Gulf Formation Period.

NRHP Eligibility Assessment

Site 8OK61 was assessed with respect to its integrity and its ability to yield information about the past. In addressing the integrity of the site, the aspects of location, design, setting, materials, workmanship, feeling, and association were considered. Site 8OK61 is present in its original location. The site does not contain materials redeposited from other locales. The design of former activity areas can be reconstructed based on the presence of discrete artifact clusters and intact cultural features (shell middens). The setting of 8OK61 has been altered significantly since the time of primary occupation; however, the sites relationship to Santa Rosa Sound and geomorphological landforms is probably the same as when 8OK81 site was occupied. The presence of intact cultural deposits and discrete artifact clusters indicate good integrity of materials. Also, the presence of an artifact assemblage with diagnostic artifacts allows the quality of workmanship to be addressed. The site does not display a feeling of the prehistoric use of the property due to changes in the setting since its primary occupation.

Finally, it is likely that additional archaeological investigations at 8OK61 will generate information that can address important research issues, including culture chronology, artifact assemblage diversity, and subsistence patterns. Thus, 8OK61 has an association with important research issues. These issues are discussed below.

Culture Chronology

The presence of deposits associated with diagnostic artifacts that identify individual components indicates that 8OK61 has the ability to address research questions concerning the culture chronology of the region. Although no samples were collected, the presence of charcoal at each midden indicates that direct/absolute dating of these middens is possible. Obtaining absolute dates for these deposits will allow refinement or confirmation of accepted dates for the Deptford, Santa Rosa/Swift Creek, and Weeden Island cultures.

Artifact Assemblage Composition.

Discrete loci with materials from distinct components have been noted at this site. The distribution of ceramics, lithics, bone, and shell on the site provides evidence for intra-site settlement organization. Deposits at 8OK61 possess the ability to address research questions concerning intra-site patterning and inter-site comparisons of settlement organization.

Subsistence Patterns

Faunal and floral remains are well preserved at 8OK61. Analyses of these materials will allow an assessment of subsistence patterns from temporally discrete deposits. Seasonality studies on recovered shell, analysis of types and numbers of fauna represented, and ethnobotanical studies will contribute to the existing body of knowledge on Deptford, Santa Rosa/Swift Creek, and Weeden Island subsistence patters.

The ability of 8OK61 to address the research issues defined above indicates that this site can contribute to the understanding of the prehistoric development of the site or region. Site 8OK61 retains the aspects of location, design, materials, workmanship, and association. Thus, the site possesses sufficient integrity to meet Criterion D. Site 8OK61 is recommended eligible for the NRHP.

Summary and Management Recommendations

In April 1997, Brockington and Associates, Inc. conducted NRHP (Phase II) testing at 8OK61 in Okaloosa County, Florida. Intact deposits associated with the Deptford, Swift Creek, and Weeden Island occupations were noted in buried contexts on the site. Data recovered from testing of 8OK61 indicates that the site has the potential to address current research questions concerning culture chronology, artifact assemblage diversity, and subsistence practices. Based on these considerations, 8OK61 is recommended eligible for the NRHP; a nomination form has been prepared and will be submitted to the NRHP by Hurlburt Field. This site should be protected from land disturbing activities, as outlined in the Hurlburt Field Cultural Resources Management Plan (US Air Force 1996). If avoidance of 8OK61 is not possible, a data recovery plan should be implemented to mitigate any adverse effects to the site.

References Cited

Archaeological and Historic Preservation Act
1974 16 USC 469

Balsillie, J.H.
1986 Beach and Coast Erosion Due to Extreme Event Impact. *Shore and Beach* 54(4):22-36.

Barraclough, Jack
1967 Ground Water Features in Escambia and Santa Rosa Counties, Florida. *Florida Department of Natural Resources, Map Series 26.*

Executive Order 11593
For the Protection and Enhancement of the Cultural Environment

Espenshade, Christopher T., Linda Kennedy, and Bobby G. Southerlin
1994 *What is a Shell Midden? Data Recovery Excavations of Thom's Creek and Deptford Shell Middens, 38BU2, Spring Island, South Carolina.* Prepared for The Spring Island Company, Beaufort.

Marsh, O.T.
1966 Geology of Escambia and Santa Rosa Counties, Western Florida Panhandle. *Florida Geological Survey Bulletin 46.*

Musgrove, R.H., J.T. Barraclough, and R.G. Grantham
1965 Water Resources of Escambia and Santa Rosa Counties, Florida. *Florida Geological Survey Report of Investigations 40.*

Milanich, Jerald T.
1994 *Archaeology of Precolumbian Florida.* University Press of Florida, Gainesville.

Milanich, Jerald T. and Charles H. Fairbanks
1980 *Florida Archaeology.* Academic Press, Orlando, Florida.

National Historic Preservation Act
1966 16 USC 470, as amended through 1992.

National Park Service
1991 *How to Apply the National Register Criteria for Evaluation.* National Register Bulletin 15. US Department of the Interior, National Park Service Interagency Division, Washington, DC.

Simpson, R.H. and H. Riehl
1981 *The Hurricane and its Impact*. Louisiana State University Press, Baton Rouge.

Thomas, Prentice M. and Janice Campbell (eds.)
1993 *Eglin Air Force Base Historic Preservation Plan, Planning Manual, Cultural Resources Investigations at Eglin, Santa Rosa, Okaloosa, and Walton Counties, Florida*. Report submitted to the Archaeological Services Branch, National Park Service, Atlanta. New World Research Report of Investigations Number 192 (sic.). Fort Walton, Florida.

US Air Force
1996 *Cultural Resources Management Plan, Hurlburt Field*. Prepared for the US Air Force Special Operations Command.

US Department of Commerce, National Weather Service
1972 Climate of the States: Florida. *Climatology of the United States* 60.

Willey, Gordon R.
1949 *Archaeology of the Florida Gulf Coast*. Smithsonian Institution, Washington, DC.

Appendix A

Artifact Inventory

THE FIRST COLUMN GIVES THE PROVENIENCE:CATALOG NUMBER. THE SECOND COLUMN GIVES THE COUNT. THE THIRD COLUMN GIVES THE WEIGHT IN GRAMS, WHEN APPLICABLE. RESIDUAL SHERDS ARE PREHISTORIC CERAMIC SHERDS THAT ARE LESS THAN ONE INCH IN DIAMETER AND CANNOT BE PRECISELY IDENTIFIED AS TO SURFACE TREATMENT.

BROCKINGTON AND ASSOCIATES, INC. USES THE FOLLOWING PROVENIENCING SYSTEM.

Prov. 1 Designates General Surface Collection.

Numbers after the decimal designate subsequent collections.

Prov. 2 to 200 Designate shovel tests.

2.0 designates surface at that shovel tests.

2.1 designates level 1 of a shovel test.

2.2 etc... designates other levels of a shovel test.

Controlled surface collections and 50 x 50 cm units are also designated by these numbers.

Prov. 201 to 400 designate 1 x 1 m units done for testing purposes.

Prov. 401 to 600 designate 2 x 2 m units done for data recovery.

Numbers after the decimal designate levels. Also flotation is designated by 01 added after the last number. For example unit 401.4 is unit 401, level 4. 401.401 designates the flotation from unit 401, level 4.

Prov. 601 and over designate features. Numbers after the decimal designate levels.

SITE NUMBER : 8OK61

Provenience # 2.1	2.1:1	2	Description : 440 North, 485 East plain body sherd, granular temper
	2.1:2	2	residual sherd

Provenience # 3.1	3.1:1	1	Description : 455 North, 485 East plain body sherd, coarse sand temper
	3.1:2	5	plain body sherd, very coarse sand temper
	3.1:3	2	residual sherd

Provenience # 4.1	4.1:1	1	Description : 470 North, 485 East eroded body sherd, fine/medium sand temper
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Provenience # 5.1	5.1:1	8	Description : 470 North, 515 East unidentifiable iron fragment
	5.1:2	2.8	faunal material

Provenience # 6.1	6.1:1	1	Description : 470 North, 530 East folded incised rim sherd, coarse sand temper, Swift Creek
	6.1:2	1	folded burnished rim sherd, shell and coarse sand temper
	6.1:3	1	plain body sherd, shell temper
	6.1:4	1	plain body sherd, coarse sand temper
	6.1:5	2	burnished body sherd, coarse sand temper
	6.1:6	2	residual sherd
	6.1:7	1	clear bottle glass

Provenience # 7.1	7.1:0	Description : 470 North, 575 East no cultural material
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Provenience # 8.1	8.1:1	1	Description : 485 North, 470 East plain body sherd, very coarse sand temper
	8.1:2	2	burnished body sherd, very coarse sand temper
	8.1:3	18.4	brick (discarded in lab)
	8.1:4	79.3	channel whelk (discarded in lab)

Provenience # 9.1	9.1:1	1	Description : 485 North, 485 East brown salt glazed gray bodied stoneware
	9.1:2	1	clear salt glazed buff bodied stoneware with brown glazed interior
	9.1:3	1	molded amethyst bottle glass
	9.1:4	146.5	channel whelk (discarded in lab)

Provenience # 10.1	10.1:1	1	Description : 485 North, 515 East brown bottle glass
	10.1:2	10.8	brick (discarded in lab)
	10.1:3	22.6	mortar (discarded in lab)
	10.1:4	0.3	faunal material

Provenience # 11.1	11.1:1	1	Description : 485 North, 530 East clear bottle glass
	11.1:2	5.2	faunal material
	11.1:3	1.6	brick (discarded in lab)
	11.1:4	6.9	mortar (discarded in lab)

Provenience # 12.1	12.1:1	59.8	Description : 485 North, 560 East channel whelk (discarded in lab)
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Provenience # 13.1	13.1:1	26.0	Description : 485 North, 575 East channel whelk (discarded in lab)
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Provenience # 14.1	14.1:1	1	Description : 500 North, 440 East burnished body sherd, coarse sand temper
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Provenience # 15.1	15.1:1	85.4	Description : 500 North, 470 East channel whelk (discarded in lab)
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8OK61 continued

Provenience # 16.1		Description : 500 North, 485 East
16.1:1	2	undecorated whiteware
16.1:2	5	clear bottle glass
16.1:3	8	light blue bottle glass
16.1:4	1	unidentifiable square nail
16.1:5	1	incised body sherd, coarse sand temper, Weeden Island

Provenience # 17.1		Description : 500 North, 515 East
17.1:1	1	undecorated ironstone
17.1:2	2	amethyst bottle glass
17.1:3	2	unidentifiable square nail
17.1:4	18.9	brick (discarded in lab)

Provenience # 18.1		Description : 500 North, 530 East
18.1:1	1	burnished body sherd, coarse sand and grog temper
18.1:2	1	plain body sherd, coarse sand temper
18.1:3	1	residual sherd
18.1:4	117.6	brick (discarded in lab)

Provenience # 19.1		Description : 500 North, 545 East
19.1:1	32.5	channel whelk (discarded in lab)

Provenience # 20.1		Description : 500 North, 560 East
20.1:1	1	check stamped folded rim sherd, coarse sand temper, Deptford
20.1:2	1	plain body sherd, coarse sand and grog temper
20.1:3	1	residual sherd
20.1:4	102.1	channel whelk (discarded in lab)

Provenience # 21.1		Description : 515 North, 485 East
21.1:1	1	unidentifiable white bodied ceramic
21.1:2	2	chert flake

Provenience # 22.1		Description : 515 North, 515 East
22.1:1	1	plain body sherd, coarse sand temper
22.1:2	1	plain body sherd, grog temper
22.1:3	2	residual sherd
22.1:4	23.9	clam (discarded in lab)
22.1:5	1	English undecorated porcelain

Provenience # 23.1		Description : 515 North, 560 East
23.1:1	1	incised body sherd, coarse sand temper, Ft. Walton

Provenience # 24.1		Description : 515 North, 575 East
24.1:1	1	plain body sherd, coarse sand temper

Provenience # 25.1		Description : 530 North, 515 East
25.1:1	1	residual sherd
25.1:2	1	clear bottle glass
25.1:3	2	amethyst bottle glass
25.1:4	1	unidentifiable iron object

Provenience # 26.1		Description : 530 North, 530 East
26.1:1	12.3	brick (discarded in lab)

Provenience # 27.1		Description : 530 North, 545 East
27.1:1	1	quartzite shatter

Provenience # 28.1		Description : 530 North, 560 East
28.1:1	2	plain body sherd, coarse sand temper

Provenience # 29.1		Description : 545 North, 515 East
29.1:1	1	eroded body sherd, coarse sand and grog temper

Provenience # 30.1		Description : 545 North, 560 East
30.1:1	1	chert flake
30.1:2	59.6	channel whelk (discarded in lab)

8OK61 continued

Provenience # 31.1		Description : 550 North, 590 East
31.1:1	1	eroded body sherd, coarse sand and grog temper
31.1:2	19.1	whelk (discarded in lab)

Provenience # 32.1		Description : 455 North, 545 East
32.1:1	4	residual sherd

Provenience # 33.1		Description : 515 North, 545 East
33.1:1	1	eroded body sherd, coarse sand temper

Provenience # 34.1		Description : 545 North, 545 East
34.1:1	1	chert flake

Provenience # 35.1		Description : 470 North, 545 East
35.1:1	4	light green bottle glass
35.1:2	1	brown bottle glass
35.1:3	4	eroded body sherd, coarse sand temper
35.1:4	1	plain body sherd, very coarse sand temper
35.1:5	2	plain body sherd, shell temper
35.1:6	11	residual sherd
35.1:7	3.0	faunal material

Provenience #201.1		Description : Unit 201, Level 1
201.1:1	1	plain body sherd, shell temper
201.1:2	1	residual sherd
201.1:3	2.0	faunal material
201.1:4	81.6	clam (discarded in lab)
201.1:5	250.0	oyster (discarded in lab)

Provenience #201.2		Description : Unit 201, Level 2
201.2:1	1	eroded body sherd, fine/medium sand temper
201.2:2	1	eroded body sherd, very coarse sand temper
201.2:3	2	plain body sherd with burnished interior, coarse sand temper
201.2:4	3	plain body sherd, shell temper
201.2:5	2	residual sherd
201.2:6	115.8	clam (discarded in lab)
201.2:7	0.8	faunal material
201.2:8	1500.0	oyster (discarded in field)

Provenience #201.3		Description : Unit 201, Level 3
201.3:1	1	plain rim sherd, coarse sand temper
201.3:2	9	plain body sherd, coarse sand temper
201.3:3	5	plain body sherd, very coarse sand temper
201.3:4	2	plain body sherd, grog temper
201.3:5	1	plain body sherd, shell temper
201.3:6	2	eroded body sherd, very coarse sand temper
201.3:7	4	check stamped body sherd with burnished interior, coarse sand temper, Deptford
201.3:8	6	residual sherd
201.3:9	25.8	faunal material
201.3:10	17200.0	oyster (discarded in field)
201.3:11	4000.0	other shell (discarded in lab)

Provenience #201.4		Description : Unit 201, Level 4
201.4:1	1	unidentifiable complicated stamped body sherd, coarse sand temper, Swift Creek
201.4:2	1	check stamped body sherd, coarse sand temper, Deptford
201.4:3	1	plain body sherd, very coarse sand temper
201.4:4	1	plain rim sherd, very coarse sand temper
201.4:5	3	residual sherd
201.4:6	9.7	faunal material
201.4:7	1000.0	oyster (discarded in field)
201.4:8	211.1	clam (discarded in lab)

Provenience #201.5		Description : Unit 201, Level 5
201.5:1	3	eroded body sherd, coarse sand and grog temper
201.5:2	5	residual sherd
201.5:3	3.2	faunal material
201.5:4	14.6	clam (discarded in lab)
201.5:5	13.8	snail (discarded in lab)
201.5:6	250.0	oyster (discarded in field)

Provenience #201.6		Description : Unit 201, Level 6
201.6:1	1	eroded body sherd, very coarse sand temper
201.6:2	2	residual sherd
201.6:3	2.1	faunal material
201.6:4	22.6	clam (discarded in lab)
201.6:5	1.0	oyster (discarded in field)

8OK61 continued

Provenience #201.7		Description : Unit 201, Level 7
201.7:1	2.0	oyster (discarded in lab)

Provenience #201.8		Description : Unit 201, Level 8
201.8:1	1	chert flake

Provenience #201.9		Description : Unit 201, Level 9
201.9:1	14.7	clam (discarded in lab)

Provenience #202.1		Description : Unit 202, Level 1
202.1:1	3	clear bottle glass
202.1:2	1	brown bottle glass
202.1:3	2	eroded body sherd, coarse sand temper
202.1:4	4	residual sherd
202.1:5	500.0	oyster (discarded in field)
202.1:6	44.5	whelk (discarded in lab)
202.1:7	144.7	clam (discarded in lab)

Provenience #202.2		Description : Unit 202, Level 2
202.2:1	2	incised body sherd with burnished interior, coarse sand temper, Weeden Island
202.2:2	1	incised rim sherd with burnished interior, coarse sand temper, Weeden Island
202.2:3	1	punctate rim sherd, fine/medium sand temper, Weeden Island
202.2:4	7	plain body sherd, shell temper
202.2:5	1	podal support, coarse sand temper, probable Deptford
202.2:6	6	residual sherd
202.2:7	1	brown bottle glass
202.2:8	8.7	faunal material
202.2:9	6000.0	clam (discarded in field)

Provenience #202.3		Description : Unit 202, Level 3
202.3:1	1	incised rim sherd, coarse sand temper, Weeden Island
202.3:2	1	punctate body sherd, coarse sand temper, Weeden Island
202.3:3	1	plain body sherd, fine/medium sand temper

202.3:4	1	residual sherd
202.3:5	2.6	faunal material
202.3:6	22000.0	clam (discarded in field)
202.3:7	5.5	channel whelk (discarded in lab)

Provenience #202.4		Description : Unit 202, Level 4
202.4:1	1	fabric impressed body sherd, very coarse sand temper, Deptford
202.4:2	2	residual sherd
202.4:3	1.1	faunal material
202.4:4	4000.0	clam (discarded in lab)

Provenience #202.5		Description : Unit 202, Level 5
202.5:1	0.4	faunal material
202.5:2	40.0	clam (discarded in field)

Provenience #203.1		Description : Unit 203, Level 1
203.1:1	125.1	channel whelk (discarded in lab)
203.1:2	22.8	clam (discarded in lab)
203.1:3	3000.0	oyster (discarded in field)

Provenience #203.2		Description : Unit 203, Level 2
203.2:1	1	check stamped rim sherd, coarse sand temper, Deptford
203.2:2	1	check stamped body sherd, coarse sand temper, Deptford
203.2:3	2	residual sherd
203.2:4	2	chert flake
203.2:5	40.9	channel whelk (discarded in lab)
203.2:6	8500.0	oyster (discarded in field)
203.2:7	6000.0	clam (discarded in field)

Provenience #203.3		Description : Unit 203, Level 3
203.3:1	1	chert flake
203.3:2	280.5	clam (discarded in lab)
203.3:3	500.0	oyster (discarded in field)

Provenience #203.4		Description : Unit 203, Level 4
203.4:1	2	eroded body sherd, coarse sand temper
203.4:2	250.0	oyster (discarded in field)
203.4:3	31.3	clam (discarded in lab)

8OK61 continued

Provenience #203.5 Description : Unit 203, Level 5
203.5:1 4 plain body sherd, fiber temper,
 Norwood
203.5:2 1.0 oyster (discarded in field)
203.5:3 14.0 clam (discarded in lab)

Provenience #203.6 Description : Unit 203, Level 6
203.6:1 0.9 oyster (discarded in lab)

Provenience #203.7 Description : Unit 203, Level 7
203.7:1 8.2 oyster (discarded in lab)

Appendix B:

Comments of the
Florida State Historic Preservation Officer



FLORIDA DEPARTMENT OF STATE
Sandra B. Mortham
Secretary of State
DIVISION OF HISTORICAL RESOURCES

August 26, 1997

Mr. Curtis M. Flakes, Chief
Planning and Environmental Division
Environmental and Resources Planning Section
Mobile District, Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36638-0001

In Reply Refer To:
Frank J. Keel
Historic Preservation Planner
Project File No. 974050

RE: Cultural Resource Assessment Review Request
Phase II Archaeological Testing of 8OK61, Hurlburt Field, Florida. By
Brockington and Associates, Inc. 1997

Dear Mr. Flakes:

In accordance with the procedures contained in 36 C.F.R., Part 800 ("Protection of Historic Properties"), we have reviewed the results of the investigations for the referenced project performed by Brockington and Associates, Inc. and find them to sufficient. To make the materials complete a updated Florida Site File archaeological site form for 8OK61 and the attached survey log sheet should be completed and returned with the final report.

We concur with the determination and management recommendations outlined in the report for archaeological site 8OK61. However, our review of the report indicate that several inconsistencies should be addressed in the final version:

- page 4: change "Laura A. Kammerer (State Historic Preservation Officer)" to Laura A. Kammerer (State Historic Preservation Office)"
- page 17: The National Register eligibility of archaeological sites is based on their the integrity and ability to yield information about the past. Although certain aspects of location, design, setting, materials, workmanship, feeling and association may be included in the determination of significance, these elements are primarily reserved for historical structure or buildings. We suggest the first sentence of the first paragraph read: "Site 8OK61 was assessed with respect to its integrity and ability to yield information about the past."

DIRECTOR'S OFFICE

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Mr. Flakes
August 26, 1997
Page 2

If you have any questions concerning our comments, please do not hesitate to contact us. Your interest in protecting Florida's historic properties is appreciated.

Sincerely,

Laura A. Kammerer
for George W. Percy, Director
Division of Historical Resources
and
State Historic Preservation Officer

GWP/Kfk